What is claimed:

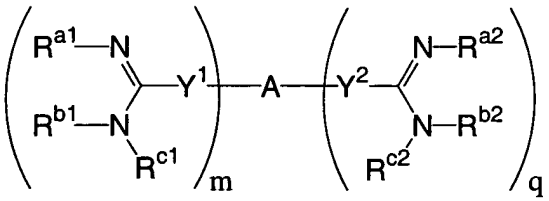
1. A method of treating or preventing an amyloid–related disease in a subject comprising administering to said subject a therapeutic amount of an amidine compound.

2. The method according to claim 1, wherein said compound is a bis(amidine) compound, and said disease is Alzheimer's disease, cerebral amyloid angiopathy, inclusion body myositis, Down's syndrome, or type II diabetes.

3. The method according to claim 1, wherein said compound is a bis(amidine) compound.

4. The method according to claim 1, wherein said compound is a bis(benzamidine) compound.

5. The method according to claim 1, wherein said compound is selected according to the following Formula, such that amyloid fibril formation or deposition, neurodegeneration, or cellular toxicity is reduced or inhibited:



(Formula X)

wherein each R^{a1}, R^{b1}, R^{c1}, R^{a2}, R^{b2}, and R^{c2} is independently a hydrogen, a Z group, or R^{a1} and R^{b1} or R^{a2} and R^{b2} are both taken together along with the nitrogen atoms to which they are bound to form a ring structure;

each of Y^1 and Y^2 is independently a direct bond or a linking moiety;

m and q are each independently an integer selected from zero to five inclusive, such that $2 \leq m+q \leq 5$; and

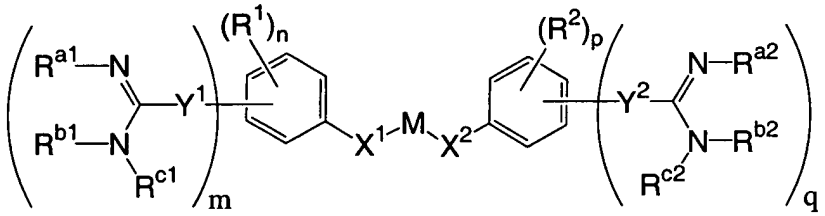
A is a carrier moiety selected from substituted or unsubstituted aliphatic and aromatic groups, and combinations thereof; such that the Y^1 and Y^2 moieties are bonded to an aromatic group;

Z is a substituted or unsubstituted moiety selected from straight or branched alkyl, cycloalkyl, alkoxy, thioalkyl, alkenyl, alkynyl, heterocyclic, carbocyclic, aryl, aryloxy, aralkyl, aryloxyalkyl, arylacetamidoyl, alkylaryl, heteroaralkyl, alkylcarbonyl, arylcarbonyl, heteroarylcarbonyl, or heteroaryl group, $(CR'R'')_{0-10}NR'R''$, $(CR'R'')_{0-10}CN$, NO_2, halogen, $(CR'R'')_{0-10}C(halogen)_3$, $(CR'R'')_{0-10}CH(halogen)_2$, $(CR'R'')_{0-10}CH_2(halogen)$, $(CR'R'')_{0-10}CONR'R''$, $(CR'R'')_{0-10}(CNH)NR'R''$, $(CR'R'')_{0-10}S(O)_{1-2}NR'R''$, $(CR'R'')_{0-10}CHO$, $(CR'R'')_{0-10}O(CR'R'')_{0-10}H$, $(CR'R'')_{0-10}S(O)_{0-3}R'$, $(CR'R'')_{0-10}O(CR'R'')_{0-10}H$, $(CR'R'')_{0-10}S(CR'R'')_{0-3}H$, $(CR'R'')_{0-10}OH$, $(CR'R'')_{0-10}COR'$, $(CR'R'')_{0-10}$(substituted or unsubstituted phenyl), $(CR'R'')_{0-10}(C_3\text{-}C_8$ cycloalkyl), $(CR'R'')_{0-10}CO_2R'$, or $(CR'R'')_{0-10}OR'$ group, or the side chain of any naturally occurring amino acid;

R' and R" are each independently hydrogen, a C_1–C_5 alkyl, C_2–C_5 alkenyl, C_2–C_5 alkynyl, or aryl group, or R' and R" taken together are a benzylidene group or a $-(CH_2)_2O(CH_2)_2-$ group;

and pharmaceutically acceptable salts thereof.

6. The method according to claim 1, wherein said compound is selected according to the following Formula, such that amyloid fibril formation or deposition, neurodegeneration, or cellular toxicity is reduced or inhibited:



(Formula I)

wherein each R^{a1}, R^{b1}, R^{c1}, R^{a2}, R^{b2}, and R^{c2} is independently a hydrogen, a Z group, or R^{a1} and R^{b1} or R^{a2} and R^{b2} are both taken together along with the nitrogen atoms to which they are bound to form a ring structure;

each of Y^1 and Y^2 is independently a direct bond or a linking moiety;

each of R^1 and R^2 is independently a hydrogen or a Z group, or two adjacent or proximate R^1 or R^2 groups taken together with the ring to which they are bound form a fused aromatic, heteroaromatic, cycloalkyl, or heterocylic structure;

each of X^1 and X^2 is independently an alkylene group, an oxygen, a NR' group (where R' is hydrogen, a C_1–C_5 alkyl, C_2–C_5 alkenyl, C_2–C_5 alkynyl, or aryl group), a sulfonamide group, a carbonyl, amide, C_1–C_5 alkylene group, C_2–C_5 alkenyl group, C_2–C_5 alkynyl group, or a sulfur atom, or combinations thereof or a direct bond;

M is an alkylene group, an alkenylene group, an alkynylene group, an alkoxyalkylene group, an alkylaminoalkylene group, a thioalkoxyalkylene group, an arylenedialkylene group, an alkylenediarylene group, a heteroarylenedialkylene group, an arylene group, a heteroarylene group, an oligoethereal or oligo(alkyleneoxide) group, or an arylene–di(oligoalkyleneoxide) group, each of which may be substituted or unsubstituted;

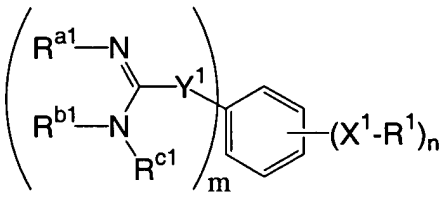
Z is a substituted or unsubstituted moiety selected from straight or branched alkyl, cycloalkyl, alkoxy, thioalkyl, alkenyl, alkynyl, heterocyclic, carbocyclic, aryl, aryloxy, aralkyl, aryloxyalkyl, arylacetamidoyl, alkylaryl, heteroaralkyl, alkylcarbonyl, arylcarbonyl, heteroarylcarbonyl, or heteroaryl group, $(CR'R'')_{0-10}NR'R''$, $(CR'R'')_{0-10}CN$, NO_2, halogen, $(CR'R'')_{0-10}C(halogen)_3$, $(CR'R'')_{0-10}CH(halogen)_2$, $(CR'R'')_{0-10}CH_2(halogen)$, $(CR'R'')_{0-10}CONR'R''$, $(CR'R'')_{0-10}(CNH)NR'R''$, $(CR'R'')_{0-10}S(O)_{1-2}NR'R''$, $(CR'R'')_{0-10}CHO$, $(CR'R'')_{0-10}O(CR'R'')_{0-10}H$, $(CR'R'')_{0-10}S(O)_{0-3}R'$, $(CR'R'')_{0-10}O(CR'R'')_{0-10}H$, $(CR'R'')_{0-10}S(CR'R'')_{0-3}H$, $(CR'R'')_{0-10}OH$, $(CR'R'')_{0-10}COR'$, $(CR'R'')_{0-10}$(substituted or unsubstituted phenyl), $(CR'R'')_{0-10}(C_3$-C_8 cycloalkyl), $(CR'R'')_{0-10}CO_2R'$, or $(CR'R'')_{0-10}OR'$ group, or the side chain of any naturally occurring amino acid;

R' and R" are each independently hydrogen, a C_1–C_5 alkyl, C_2–C_5 alkenyl, C_2–C_5 alkynyl, or aryl group, or R' and R" taken together are a benzylidene group or a $-(CH_2)_2O(CH_2)_2-$ group;

m and q are each independently an integer selected from zero to four inclusive, and n and p are each independently an integer selected from zero to four inclusive, such that $m+n\leq 5$ and $p+q\leq 5$, wherein either m or q is at least one;

and pharmaceutically acceptable salts thereof.

7. The method according to claim 1, wherein said compound is selected according to the following Formula, such that amyloid fibril formation or deposition, neurodegeneration, or cellular toxicity is reduced or inhibited:



(Formula II)

wherein each R^{a1}, R^{b1}, R^{c1}, R^{a2}, R^{b2}, and R^{c2} is independently a hydrogen, a Z group other than a substituted aryl group or a substituted alkyl group, or R^{a1} and R^{b1} or R^{a2} and R^{b2} are both taken together along with the nitrogen atoms to which they are bound to form a ring structure;

Y^1 is a direct bond or a linking moiety;

R^1 is a hydrogen or a Z group, or two adjacent or proximate R^1 groups taken together with the corresponding X^1 groups and the ring to which they are bound form a fused aromatic, heteroaromatic, cycloalkyl, or heterocylic structure;

X^1 is an alkylene group, an oxygen, a NR' group (where R' is hydrogen, a C_1–C_5 alkyl, C_2–C_5 alkenyl, C_2–C_5 alkynyl, or aryl group), a sulfonamide group, a carbonyl, amide, C_1–C_5 alkylene group, C_2–C_5 alkenyl group, C_2–C_5 alkynyl group, or a sulfur atom, or combinations thereof or a direct bond;

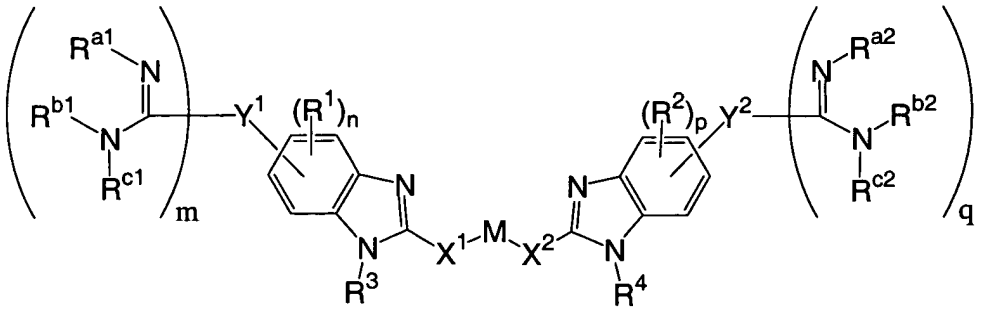
Z is a substituted or unsubstituted moiety selected from straight or branched alkyl, cycloalkyl, alkoxy, thioalkyl, alkenyl, alkynyl, heterocyclic, carbocyclic, aryl, aryloxy, aralkyl, aryloxyalkyl, arylacetamidoyl, alkylaryl, heteroaralkyl, alkylcarbonyl, arylcarbonyl, heteroarylcarbonyl, or heteroaryl group, $(CR'R'')_{0-10}NR'R''$, $(CR'R'')_{0-10}CN$, NO_2, halogen, $(CR'R'')_{0-10}C(halogen)_3$, $(CR'R'')_{0-10}CH(halogen)_2$, $(CR'R'')_{0-10}CH_2(halogen)$, $(CR'R'')_{0-10}CONR'R''$, $(CR'R'')_{0-10}(CNH)NR'R''$, $(CR'R'')_{0-10}S(O)_{1-2}NR'R''$, $(CR'R'')_{0-10}CHO$, $(CR'R'')_{0-10}O(CR'R'')_{0-10}H$, $(CR'R'')_{0-10}S(O)_{0-3}R'$, $(CR'R'')_{0-10}O(CR'R'')_{0-10}H$, $(CR'R'')_{0-10}S(CR'R'')_{0-3}H$, $(CR'R'')_{0-10}OH$, $(CR'R'')_{0-10}COR'$, $(CR'R'')_{0-10}$(substituted or unsubstituted phenyl), $(CR'R'')_{0-10}(C_3\text{-}C_8$ cycloalkyl), $(CR'R'')_{0-10}CO_2R'$, or $(CR'R'')_{0-10}OR'$ group, or the side chain of any naturally occurring amino acid;

R' and R" are each independently hydrogen, a C_1–C_5 alkyl, C_2–C_5 alkenyl, C_2–C_5 alkynyl, or aryl group, or R' and R" taken together are a benzylidene group or a $-(CH_2)_2O(CH_2)_2-$ group;

m is an integer selected from one to six inclusive, and n is an integer selected from zero to five inclusive, such that $m+n \leq 6$;

and pharmaceutically acceptable salts thereof.

8. The method according to claim 1, wherein said therapeutic compound is selected according to the following Formula, such that amyloid fibril formation or deposition, neurodegeneration, or cellular toxicity is reduced or inhibited:



(Formula III)

wherein each R^{a1}, R^{b1}, R^{c1}, R^{a2}, R^{b2}, and R^{c2} is independently a hydrogen, a Z group, or R^{a1} and R^{b1} or R^{a2} and R^{b2} are both taken together along with the nitrogen atoms to which they are bound to form a ring structure;

each of Y^1 and Y^2 is independently a direct bond or a linking moiety;

each of R^1 and R^2 is independently a hydrogen or a Z group, or two adjacent or proximate R^1 or R^2 groups taken together with the ring to which they are bound form a fused aromatic, heteroaromatic, cycloalkyl, or heterocylic structure;

each of R^3 and R^4 is independently selected from the group consisting of hydrogen, substituted or unsubstituted straight or branched alkyl, cycloalkyl, carbocyclic, aryl, heterocyclic, and heteroaryl;

each of X^1 and X^2 is independently an alkylene group, an oxygen, a NR' group (where R' is hydrogen, a C_1–C_5 alkyl, C_2–C_5 alkenyl, C_2–C_5 alkynyl, or aryl group), a sulfonamide group, a carbonyl, amide, C_1–C_5 alkylene group, C_2–C_5 alkenyl group, C_2–C_5 alkynyl group, or a sulfur atom, or combinations thereof or a direct bond;

M is an alkylene group, an alkenylene group, an alkynylene group, an alkoxyalkylene group, an alkylaminoalkylene group, a thioalkoxyalkylene group, an arylenedialkylene group, an alkylenediarylene group, a heteroarylenedialkylene group, an arylene group, a heteroarylene group, an oligoethereal or oligo(alkyleneoxide) group, or an arylene–di(oligoalkyleneoxide) group, each of which may be substituted or unsubstituted;

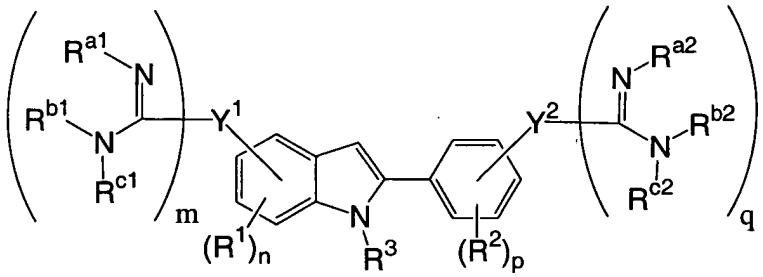
Z is a substituted or unsubstituted moiety selected from straight or branched alkyl, cycloalkyl, alkoxy, thioalkyl, alkenyl, alkynyl, heterocyclic, carbocyclic, aryl, aryloxy, aralkyl, aryloxyalkyl, arylacetamidoyl, alkylaryl, heteroaralkyl, alkylcarbonyl, arylcarbonyl, heteroarylcarbonyl, or heteroaryl group, $(CR'R'')_{0-10}NR'R''$, $(CR'R'')_{0-10}CN$, NO_2, halogen, $(CR'R'')_{0-10}C(halogen)_3$, $(CR'R'')_{0-10}CH(halogen)_2$, $(CR'R'')_{0-10}CH_2(halogen)$, $(CR'R'')_{0-10}CONR'R''$, $(CR'R'')_{0-10}(CNH)NR'R''$, $(CR'R'')_{0-10}S(O)_{1-2}NR'R''$, $(CR'R'')_{0-10}CHO$, $(CR'R'')_{0-10}O(CR'R'')_{0-10}H$, $(CR'R'')_{0-10}S(O)_{0-3}R'$, $(CR'R'')_{0-10}O(CR'R'')_{0-10}H$, $(CR'R'')_{0-10}S(CR'R'')_{0-3}H$, $(CR'R'')_{0-10}OH$, $(CR'R'')_{0-10}COR'$, $(CR'R'')_{0-10}$(substituted or unsubstituted phenyl), $(CR'R'')_{0-10}(C_3$-C_8 cycloalkyl), $(CR'R'')_{0-10}CO_2R'$, or $(CR'R'')_{0-10}OR'$ group, or the side chain of any naturally occurring amino acid;

R' and R" are each independently hydrogen, a C_1–C_5 alkyl, C_2–C_5 alkenyl, C_2–C_5 alkynyl, or aryl group, or R' and R" taken together are a benzylidene group or a $-(CH_2)_2O(CH_2)_2-$ group;

m, n, p, and q are each independently an integer selected from zero to three inclusive, m+n≤4, p+q≤4, and m+q≥1;

and pharmaceutically acceptable salts thereof.

9. The method according to claim 1, wherein said compound is selected according to the following Formula, such that amyloid fibril formation or deposition, neurodegeneration, or cellular toxicity is reduced or inhibited:



(Formula IV)

wherein each R^{a1}, R^{b1}, R^{c1}, R^{a2}, R^{b2}, and R^{c2} is independently a hydrogen, a Z group, or R^{a1} and R^{b1} or R^{a2} and R^{b2} are both taken together along with the nitrogen atoms to which they are bound to form a ring structure;

each of Y^1 and Y^2 is independently a direct bond or a linking moiety;

each of R^1 and R^2 is independently a hydrogen or a Z group, or two adjacent or proximate R^1 or R^2 groups taken together with the ring to which they are bound form a fused aromatic, heteroaromatic, cycloalkyl, or heterocylic structure;

R^3 is selected from the group consisting of hydrogen, substituted or unsubstituted straight or branched alkyl, cycloalkyl, carbocyclic, aryl, heterocyclic, and heteroaryl;

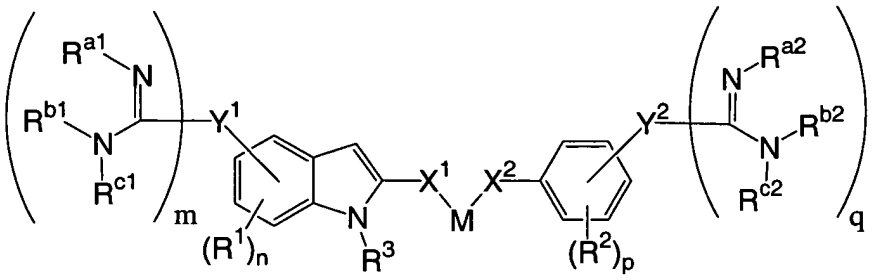
Z is a substituted or unsubstituted moiety selected from straight or branched alkyl, cycloalkyl, alkoxy, thioalkyl, alkenyl, alkynyl, heterocyclic, carbocyclic, aryl, aryloxy, aralkyl, aryloxyalkyl, arylacetamidoyl, alkylaryl, heteroaralkyl, alkylcarbonyl, arylcarbonyl, heteroarylcarbonyl, or heteroaryl group, $(CR'R'')_{0-10}NR'R''$, $(CR'R'')_{0-10}CN$, NO_2, halogen, $(CR'R'')_{0-10}C(halogen)_3$, $(CR'R'')_{0-10}CH(halogen)_2$, $(CR'R'')_{0-10}CH_2(halogen)$, $(CR'R'')_{0-10}CONR'R''$, $(CR'R'')_{0-10}(CNH)NR'R''$, $(CR'R'')_{0-10}S(O)_{1-2}NR'R''$, $(CR'R'')_{0-10}CHO$, $(CR'R'')_{0-10}O(CR'R'')_{0-10}H$, $(CR'R'')_{0-10}S(O)_{0-3}R'$, $(CR'R'')_{0-10}O(CR'R'')_{0-10}H$, $(CR'R'')_{0-10}S(CR'R'')_{0-3}H$, $(CR'R'')_{0-10}OH$, $(CR'R'')_{0-10}COR'$, $(CR'R'')_{0-10}$(substituted or unsubstituted phenyl), $(CR'R'')_{0-10}(C_3\text{-}C_8$ cycloalkyl), $(CR'R'')_{0-10}CO_2R'$, or $(CR'R'')_{0-10}OR'$ group, or the side chain of any naturally occurring amino acid;

R' and R" are each independently hydrogen, a C_1–C_5 alkyl, C_2–C_5 alkenyl, C_2–C_5 alkynyl, or aryl group, or R' and R" taken together are a benzylidene group or a $-(CH_2)_2O(CH_2)_2-$ group;

m and n are each independently an integer selected from zero to three inclusive, p and q are each independently an integer selected from zero to four inclusive, $m+n\leq 4$, $p+q\leq 5$, and $m+q\geq 1$;

and pharmaceutically acceptable salts thereof.

10. The method according to claim 1, wherein said compound is selected according to the following Formula, such that amyloid fibril formation or deposition, neurodegeneration, or cellular toxicity is reduced or inhibited:



(Formula IVb)

wherein each R^{a1}, R^{b1}, R^{c1}, R^{a2}, R^{b2}, and R^{c2} is independently a hydrogen, a Z group, or R^{a1} and R^{b1} or R^{a2} and R^{b2} are both taken together along with the nitrogen atoms to which they are bound to form a ring structure;

each of Y^1 and Y^2 is independently a direct bond or a linking moiety;

each of R^1 and R^2 is independently a hydrogen or a Z group, or two adjacent or proximate R^1 or R^2 groups taken together with the ring to which they are bound form a fused aromatic, heteroaromatic, cycloalkyl, or heterocylic structure;

R^3 is selected from the group consisting of hydrogen, substituted or unsubstituted straight or branched alkyl, cycloalkyl, carbocyclic, aryl, heterocyclic, and heteroaryl;

each of X^1 and X^2 is independently an alkylene group, an oxygen, a NR' group (where R' is hydrogen, a C_1–C_5 alkyl, C_2–C_5 alkenyl, C_2–C_5 alkynyl, or aryl group), a sulfonamide group, a carbonyl, amide, C_1–C_5 alkylene group, C_2–C_5 alkenyl group, C_2–C_5 alkynyl group, or a sulfur atom, or combinations thereof or a direct bond;

M is an alkylene group, an alkenylene group, an alkynylene group, an alkoxyalkylene group, an alkylaminoalkylene group, a thioalkoxyalkylene group, an arylenedialkylene group, an alkylenediarylene group, a heteroarylenedialkylene group, an arylene group, a heteroarylene group, an oligoethereal or oligo(alkyleneoxide) group, or an arylene–di(oligoalkyleneoxide) group, each of which may be substituted or unsubstituted;

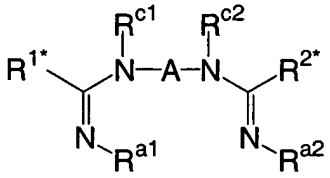
Z is a substituted or unsubstituted moiety selected from straight or branched alkyl, cycloalkyl, alkoxy, thioalkyl, alkenyl, alkynyl, heterocyclic, carbocyclic, aryl, aryloxy, aralkyl, aryloxyalkyl, arylacetamidoyl, alkylaryl, heteroaralkyl, alkylcarbonyl, arylcarbonyl, heteroarylcarbonyl, or heteroaryl group, $(CR'R'')_{0-10}NR'R''$, $(CR'R'')_{0-10}CN$, NO_2, halogen, $(CR'R'')_{0-10}C(halogen)_3$, $(CR'R'')_{0-10}CH(halogen)_2$, $(CR'R'')_{0-10}CH_2(halogen)$, $(CR'R'')_{0-10}CONR'R''$, $(CR'R'')_{0-10}(CNH)NR'R''$, $(CR'R'')_{0-10}S(O)_{1-2}NR'R''$, $(CR'R'')_{0-10}CHO$, $(CR'R'')_{0-10}O(CR'R'')_{0-10}H$, $(CR'R'')_{0-10}S(O)_{0-3}R'$, $(CR'R'')_{0-10}O(CR'R'')_{0-10}H$, $(CR'R'')_{0-10}S(CR'R'')_{0-3}H$, $(CR'R'')_{0-10}OH$, $(CR'R'')_{0-10}COR'$, $(CR'R'')_{0-10}$(substituted or unsubstituted phenyl), $(CR'R'')_{0-10}(C_3$-C_8 cycloalkyl), $(CR'R'')_{0-10}CO_2R'$, or $(CR'R'')_{0-10}OR'$ group, or the side chain of any naturally occurring amino acid;

R' and R" are each independently hydrogen, a C_1–C_5 alkyl, C_2–C_5 alkenyl, C_2–C_5 alkynyl, or aryl group, or R' and R" taken together are a benzylidene group or a –$(CH_2)_2O(CH_2)_2$– group;

m and n are each independently an integer selected from zero to three inclusive, p and q are each independently an integer selected from zero to four inclusive, $m+n\leq 4$, $p+q\leq 5$, and $m+q\geq 1$;

and pharmaceutically acceptable salts thereof.

11. The method according to claim 1, wherein said compound is selected according to the following Formula, such that amyloid fibril formation or deposition, neurodegeneration, or cellular toxicity is reduced or inhibited:



(Formula V)

wherein each R^{a1}, R^{b1}, R^{c1}, R^{a2}, R^{b2}, and R^{c2} is independently a hydrogen, a Z group, or R^{a1} and R^{b1} or R^{a2} and R^{b2} are both taken together along with the nitrogen atoms to which they are bound to form a ring structure;

A is a carrier moiety selected from substituted or unsubstituted aliphatic and aromatic groups, and combinations thereof; such that the Y^1 and Y^2 moieties are bonded to an aromatic group;

Z is a substituted or unsubstituted moiety selected from straight or branched alkyl, cycloalkyl, alkoxy, thioalkyl, alkenyl, alkynyl, heterocyclic, carbocyclic, aryl, aryloxy, aralkyl, aryloxyalkyl, arylacetamidoyl, alkylaryl, heteroaralkyl, alkylcarbonyl, arylcarbonyl, heteroarylcarbonyl, or heteroaryl group, $(CR'R'')_{0-10}NR'R''$, $(CR'R'')_{0-10}CN$, NO_2, halogen, $(CR'R'')_{0-10}C(halogen)_3$, $(CR'R'')_{0-10}CH(halogen)_2$, $(CR'R'')_{0-10}CH_2(halogen)$, $(CR'R'')_{0-10}CONR'R''$, $(CR'R'')_{0-10}(CNH)NR'R''$, $(CR'R'')_{0-10}S(O)_{1-2}NR'R''$, $(CR'R'')_{0-10}CHO$, $(CR'R'')_{0-10}O(CR'R'')_{0-10}H$, $(CR'R'')_{0-10}S(O)_{0-3}R'$, $(CR'R'')_{0-10}O(CR'R'')_{0-10}H$, $(CR'R'')_{0-10}S(CR'R'')_{0-3}H$, $(CR'R'')_{0-10}OH$, $(CR'R'')_{0-10}COR'$, $(CR'R'')_{0-10}$(substituted or unsubstituted phenyl), $(CR'R'')_{0-10}(C_3\text{-}C_8$ cycloalkyl), $(CR'R'')_{0-10}CO_2R'$, or $(CR'R'')_{0-10}OR'$ group, or the side chain of any naturally occurring amino acid;

R' and R" are each independently hydrogen, a C_1–C_5 alkyl, C_2–C_5 alkenyl, C_2–C_5 alkynyl, or aryl group, or R' and R" taken together are a benzylidene group or a $-(CH_2)_2O(CH_2)_2-$ group;

and pharmaceutically acceptable salts thereof.

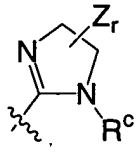
12. The method according to claim 1, wherein said amyloid–related disease is an Aβ amyloid-related disease.

13. The method according to claim 1, wherein said amyloid–related disease is Alzheimer's disease, cerebral amyloid angiopathy, Down's syndrome, or inclusion body myositis.

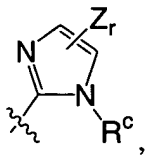
14. The method according to claim 1, wherein said amyloid–related disease is type II diabetes.

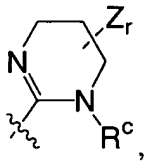
15. The method according to claim 1, where said subject is a human.

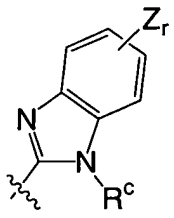
16. The method according to claim 5, wherein said ring structure is selected from the following:



, wherein r is an integer from zero to 4 inclusive,


, wherein r is an integer from zero to 2 inclusive,


, wherein r is an integer from zero to 6 inclusive,

or 
,wherein r is an integer from zero to 4 inclusive, and

Z and R^c are as defined in claim 5.

17. The method according to claim 5, wherein each of said R^{a1}, R^{b1}, R^{c1}, R^{a2}, R^{b2}, and R^{c2} groups is a hydrogen, hydroxy group, a substituted or unsubstituted C_1–C_8 alkyl or C_1–C_8 alkoxy group.

18. The method according to claim 5, wherein each of said R^{a1}, R^{b1}, R^{c1}, R^{a2}, R^{b2}, and R^{c2} groups is an aromatic group or heteroaromatic group.

19. The method according to claim 5, wherein each of said R^{a1}, R^{b1}, R^{c1}, R^{a2}, R^{b2}, and R^{c2} groups is a R^3 group as defined in claim 9.

20. The method according to claim 5, wherein each of said Y^1 and Y^2 groups is a linking moiety of less than about 75 molecular weight.

21. The method according to claim 5, wherein said Y^1 and Y^2 groups is a direct bond.

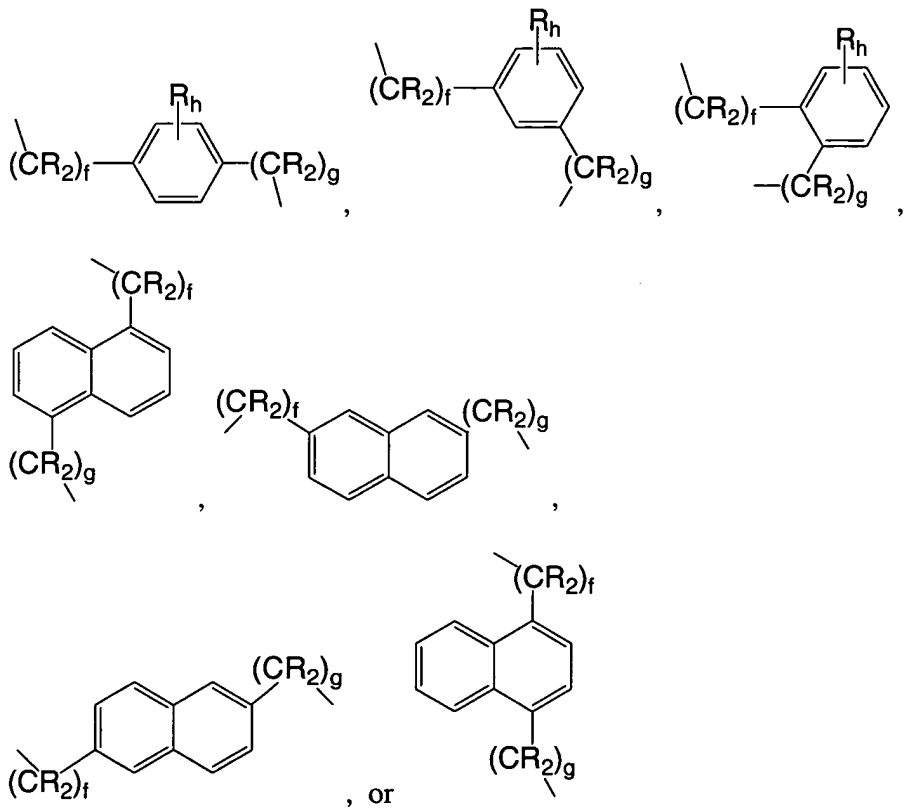
22. The method according to claim 6, wherein each of said R^1 and R^2 groups is independently a hydrogen, a substituted or unsubstituted C_1–C_8 alkyl group, a substituted or unsubstituted C_1–C_8 alkenyl group, a halogen, a substituted or unsubstituted aryl or heteroaryl group, a substituted or unsubstituted amino group, a nitro group, or a substituted or unsubstituted C_1–C_8 alkoxy group.

23. The method according to claim 6, wherein said M group is —$[(CH_2)_sO]_t(CH_2)_s$—, where t is 1 to 6 and s is 2 to 6.

24. The method according to claim 6, wherein said M group is a phenylenedialkylene

group.

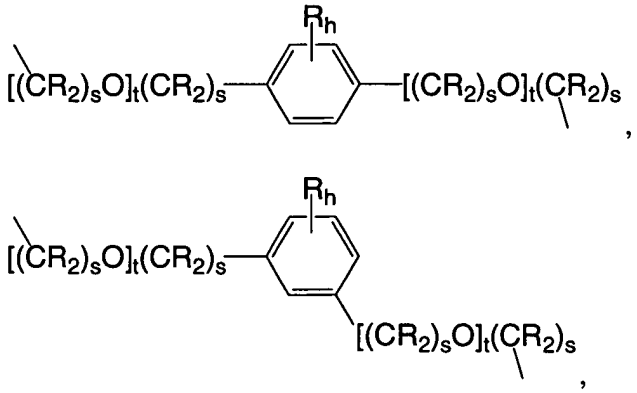
25. The method according to claim 6, wherein said M arylenedialkylene group is

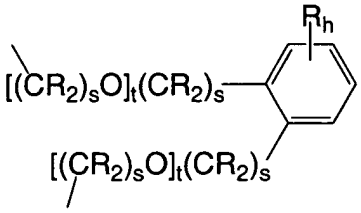


wherein each R group is independently a hydrogen or is selected from the group Z as defined in claim 5, and $1 \leq f \leq 8$, $1 \leq g \leq 8$, $0 \leq h \leq 4$.

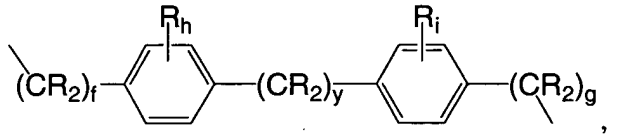
26. The method according to claim 6, wherein said M group is a substituted or unsubstituted C_2–C_8 alkylene group, a substituted or unsubstituted C_1–C_8 alkenylene group, a substituted or unsubstituted C_2–C_8 alkynylene group.

27. The method according to claim 6, wherein said M group is

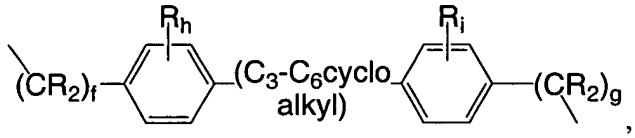




wherein $1 \leq t \leq 6$, $0 \leq s \leq 6$, $0 \leq h \leq 4$, and each R group is independently a hydrogen or is selected from the group Z as defined in claim 5; or



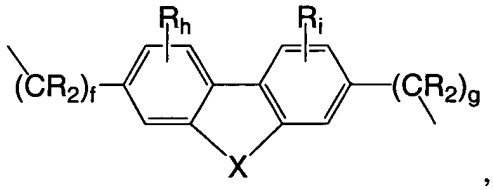
,



,

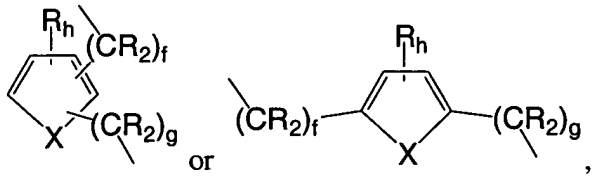
wherein $1 \leq y \leq 10$ (preferably $1 \leq y \leq 4$), $1 \leq f \leq 8$, $1 \leq g \leq 8$, $0 \leq h \leq 4$, and $0 \leq i \leq 4$, and each R group is independently a hydrogen or is selected from the group Z as defined in claim 5.

28. The method according to claim 6, wherein said M group is



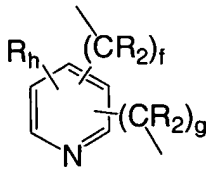
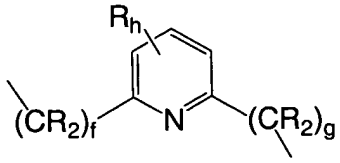
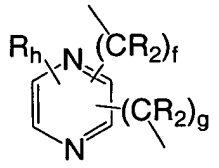
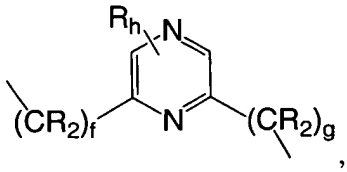
, wherein $0 \leq h \leq 3$, and $0 \leq i \leq 3$, and X = NR' (wherein R' is hydrogen, a C_1–C_5 alkyl, C_2–C_5 alkenyl, C_2–C_5 alkynyl, or aryl group), O, or S, $1 \leq f \leq 8$, $1 \leq g \leq 8$.

29. The method according to claim 6, wherein said M group is



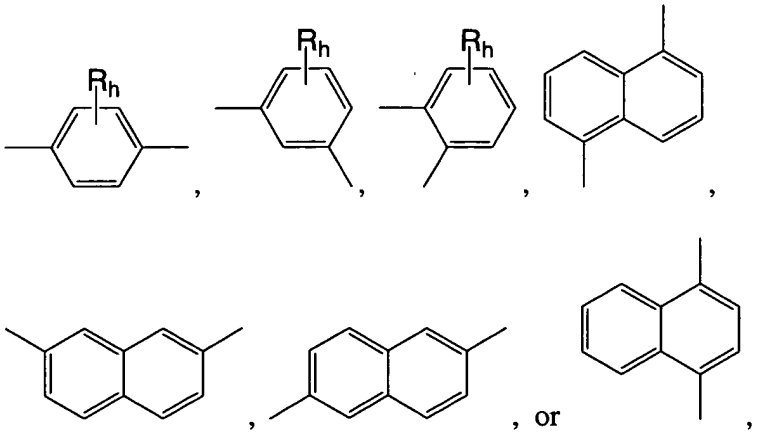
or

, wherein $0 \leq h \leq 2$, and X = NR' (wherein R' is hydrogen, a C_1–C_5 alkyl, C_2–C_5 alkenyl, C_2–C_5 alkynyl, or aryl group), O, or S, $1 \leq f \leq 8$, $1 \leq g \leq 8$.

30. The method according to claim 6, wherein said M group is  or  , wherein $0 \leq h \leq 3$, $1 \leq f \leq 8$, $1 \leq g \leq 8$,or  or  , wherein $0 \leq h \leq 2$,

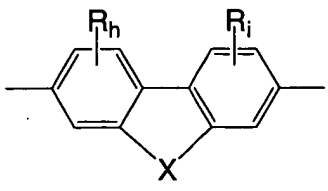
wherein each R group is independently a hydrogen or is selected from the group Z defined in claim 5, $1 \leq f \leq 8$, $1 \leq g \leq 8$.

31. The method according to claim 6, wherein said M group is

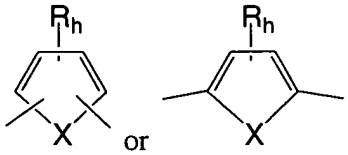


wherein each R group is independently a hydrogen or is selected from the group Z defined in claim 5, and $0 \leq h \leq 4$.

32. The method according to claim 6, wherein said M group is

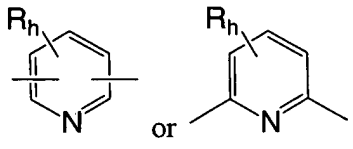
 , wherein $0 \leq h \leq 3$, and $0 \leq i \leq 3$, and X = NR' (wherein R' is hydrogen, a C_1–C_5 alkyl, C_2–C_5 alkenyl, C_2–C_5 alkynyl, or aryl group), O, or S.

33. The method according to claim 6, wherein said M group is

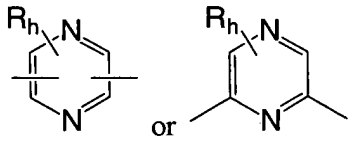


, wherein $0 \leq h \leq 2$, and X = NR' (wherein R' is hydrogen, a C_1–C_5 alkyl, C_2–C_5 alkenyl, C_2–C_5 alkynyl, or aryl group), O, or S.

34. The method according to claim 6, wherein said M group is



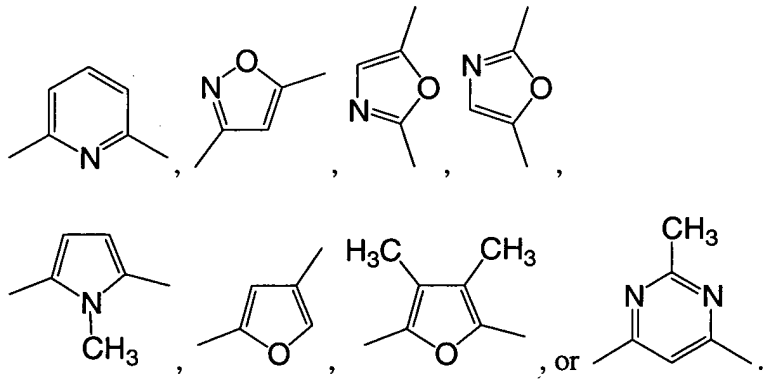
, wherein $0 \leq h \leq 3$, or



, wherein $0 \leq h \leq 2$,

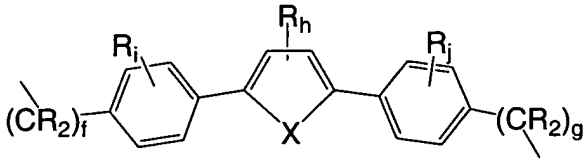
wherein each R group is independently a hydrogen or is selected from the group Z defined in claim 5.

35. The method according to claim 6, wherein said M group is



.

36. The method according to claim 6, wherein said M group is



, wherein X = NR' (wherein R' is hydrogen, a C_1–C_5 alkyl, C_2–C_5 alkenyl, C_2–C_5 alkynyl, or aryl group), O, or S; $0 \leq f \leq 8$, $0 \leq g \leq 8$; and each R group is independently a hydrogen or is selected from the group Z defined in claim 5.

37. The method according to claim 2 , wherein m=1, n=0, 1, or 2, p=0, 1, or 2, and q=1.

38. The method according to claim 5, wherein $R^{a1}=R^{a2}$, $R^{b1}=R^{b2}$, $R^{c1}=R^{c2}$, m=q, n=p, and $Y^1=Y^2$.

39. The method according to claim 6, wherein $R^1=R^2$, and $X^1=X^2$.

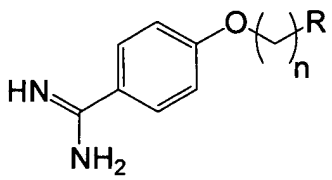
40. The method according to claim 5, wherein said pharmaceutically acceptable salt is a hydrohalide salt or a 2–hydroxyethanesulfonate salt.

41. The method according to claim 1, wherein said compound is selected from those depicted in Tables 2 and 3.

42. A pharmaceutical composition for the treatment of an amyloid–related disease comprising a compound according to claim 5.

43. The method according to claim 5, wherein said linking moiety is $-(CH_2)_n-$ (wherein n is 1, 2, or 3), $-NR^3-$ wherein R^3 is as defined in claim 9, –NH–, –S–, –O–,–NH–CH_2–, or –CH=CH–, or combinations thereof.

44. A chemical compound according to the formula:



wherein n is an interger from 7 to 10, and R is Br or CO_2H, and pharmaceutically acceptable salts thereof.

45. A pharmaceutical composition comprising a chemical compound according to claim 5.

46. A pharmaceutical composition comprising a chemical compound according to claim 44.

47. The method of claim 1, wherein said amidine compound causes in an Alzheimer's patient a stabilization of cognitive function, prevention of a further decrease in cognitive function, or prevention, slowing, or stopping of disease progression.

48. The method according to claim 5, wherein Z is a substituted or unsubstituted moiety selected from straight or branched C_1-C_5 alkyl, C_3-C_8 cycloalkyl, C_1-C_6 alkoxy, C_1-C_6 thioalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, heterocyclic, carbocyclic,

phenyl, phenoxy, benzyl, phenyloxyalkyl, arylacetamidoyl, alkylaryl, heteroaralkyl, alkylcarbonyl, arylcarbonyl, heteroarylcarbonyl, or heteroaryl group, $-NH_2$, $-CN$, NO_2, F, Cl, Br, I, $-CF_3$), $(CR'R'')_{0-3}CONR'R''$, $(CR'R'')_{0-3}(CNH)NR'R''$, $(CR'R'')_{0-3}S(O)_{1-2}NR'R''$, $(CR'R'')_{0-3}CHO$, $(CR'R'')_{0-3}O(CR'R'')_{0-3}H$, $-SO_3H$, $-CH_2OCH_3$, $-OCH_3$, $-SH$, $-SCH_3$, $-OH$, $(CR'R'')_{0-3}COR'$, $(CR'R'')_{0-3}$(substituted or unsubstituted phenyl), $(CR'R'')_{0-3}(C_3-C_8$ cycloalkyl), $-CO_2H$, or $(CR'R'')_{0-3}OR'$ group.